



SEQUENCE LISTING

<110> UNIVERSITE CATHOLIQUE DE LOUVAIN
UNIVERSITE DE MONS-HAINAUT

<120> Peroxisome-associated polypeptide, nucleotide sequence encoding
said polypeptide and their uses in the diagnosis and/or treatment
of lung injuries and diseases, and of oxidative stress-related
disorders

<130> DECLE30.001CP1

<140> US 10/686,157
<141> 2003-10-15

<150> US 6,759,194
<151> 2000-08-15

<150> PCT/BE98/00124
<151> 1998-08-20

<150> BE 1011331
<151> 1997-08-20

<160> 21

<170> PatentIn version 3.3

<210> 1
<211> 805
<212> DNA
<213> Homo sapiens

<400> 1
gccaggaggc ggagtggaag tggccgtggg gcgggtatgg gactagctgg cgtgtgcgcc 60
ctgagacgct cagcgggcta tatactcgtc ggtggggccg gcggtcagtc tgcggcagcg 120
gcagcaagac ggtgcagtga aggagagtgg gcgtctggcg gggtcgcag tttcagcaga 180
gccgctgcag ccatggcccc aatcaagggtg ggagatgcca tcccagcagt ggaggtgttt 240
gaaggggagc caggaacaa ggtgaacctg gcagagctgt tcaagggcaa gaaggggtgtg 300
ctgtttggag ttcttggggc cttcaccctt ggatgttcca agacacacct gccagggttt 360
gtggagcagg ctgaggctct gaaggccaag ggagtccagg tggtagcctg tctgagtgtt 420
aatgatgcct ttgtgactgg cgagtggggc cgagcccaca aggcggaagg caaggttcgg 480
ctcctggctg atcccactgg ggcctttggg aaggagacag acttattact agatgattcg 540
ctgggtgtcca tctttgggaa tcgacgtctc aagaggttct ccatgggtgtt acaggatggc 600
atagtgaagg ccctgaatgt ggaaccagat ggcacaggcc tcacctgcag cctggcaccc 660
aatatcatct cacagctctg aggccttggg ccagattact tctccaccc ctccctatct 720

cacctgccca gccctgtgct ggggccctgc aattggaatg ttggccagat ttctgcaata 780
 aacacttgtg gtttgcggaa aaaaa 805

<210> 2
 <211> 162
 <212> PRT
 <213> Homo sapiens

<400> 2

Met Ala Pro Ile Lys Val Gly Asp Ala Ile Pro Ala Val Glu Val Phe
 1 5 10 15

Glu Gly Glu Pro Gly Asn Lys Val Asn Leu Ala Glu Leu Phe Lys Gly
 20 25 30

Lys Lys Gly Val Leu Phe Gly Val Pro Gly Ala Phe Thr Pro Gly Cys
 35 40 45

Ser Lys Thr His Leu Pro Gly Phe Val Glu Gln Ala Glu Ala Leu Lys
 50 55 60

Ala Lys Gly Val Gln Val Val Ala Cys Leu Ser Val Asn Asp Ala Phe
 65 70 75 80

Val Thr Gly Glu Trp Gly Arg Ala His Lys Ala Glu Gly Lys Val Arg
 85 90 95

Leu Leu Ala Asp Pro Thr Gly Ala Phe Gly Lys Glu Thr Asp Leu Leu
 100 105 110

Leu Asp Asp Ser Leu Val Ser Ile Phe Gly Asn Arg Arg Leu Lys Arg
 115 120 125

Phe Ser Met Val Val Gln Asp Gly Ile Val Lys Ala Leu Asn Val Glu
 130 135 140

Pro Asp Gly Thr Gly Leu Thr Cys Ser Leu Ala Pro Asn Ile Ile Ser
 145 150 155 160

Gln Leu

<210> 3
 <211> 780
 <212> DNA
 <213> Rattus rattus

<400> 3
 tgcgtcctag gcagcatagc cggatcggtg ctccgtgcat cggctacttg gacgtgcgtg 60
 gcaggcagag caggccggaa aggagcaggt tgggagtgtg gtggggcccg cagcttcagc 120
 agtgccgcgg tgactatggc cccgatcaag gtgggagaca ccattccctc agtggaggta 180
 tttgragggg aacctggaaa gaaggtgaac ttggcagagc tgttcaagga caagaaaggt 240
 gttttgtttg gagtccctgg ggcatttaca cctggctgtt ccaagaccca tctgcctggg 300
 tttgtggagc aagccggagc tcygaaggcc aagggagcac aagtgggtggc ctgtctgagt 360
 gttaatgatg ycttcgtgac tgcagagtgg ggtcgagccc accaggcaga aggcaaggtt 420
 cagctcctgg ctgaccccac tggagctttt ggaaaggaga cagatttact actagatgat 480
 tctttggtgt ctctctttgg gaatcgtcgg ctaaaaaggt tctccatggt gatagacaag 540
 ggcgtagtaa aggcactgaa cgtggagccg gatggcacag gcctcacctg cagcctggcc 600
 cccaacatcc tctcacaact ctgaggccct gaccagaatg tcctctgact ctcccatctc 660
 ctccaccag ctctgggcca aaggcccagt acctccttac ctgagggcca ctggaatgga 720
 accttgacaa tatttctgca ataaacagtt taatttgtga aaaaaaaaaa aaaaaaaaaa 780

<210> 4
 <211> 162
 <212> PRT
 <213> Rattus rattus

<220>
 <221> MISC_FEATURE
 <222> (17)..(17)
 <223> X = E or G

<220>
 <221> MISC_FEATURE
 <222> (63)..(63)
 <223> X = L or P

<220>
 <221> MISC_FEATURE
 <222> (79)..(79)
 <223> X = L or P

<400> 4

Met Ala Pro Ile Lys Val Gly Asp Thr Ile Pro Ser Val Glu Val Phe

1	5	10	15
Xaa Gly Glu Pro Gly Lys Lys Val Asn Leu Ala Glu Leu Phe Lys Asp	20	25	30
Lys Lys Gly Val Leu Phe Gly Val Pro Gly Ala Phe Thr Pro Gly Cys	35	40	45
Ser Lys Thr His Leu Pro Gly Phe Val Glu Gln Ala Gly Ala Xaa Lys	50	55	60
Ala Lys Gly Ala Gln Val Val Ala Cys Leu Ser Val Asn Asp Xaa Phe	65	70	75
Val Thr Ala Glu Trp Gly Arg Ala His Gln Ala Glu Gly Lys Val Gln	85	90	95
Leu Leu Ala Asp Pro Thr Gly Ala Phe Gly Lys Glu Thr Asp Leu Leu	100	105	110
Leu Asp Asp Ser Leu Val Ser Leu Phe Gly Asn Arg Arg Leu Lys Arg	115	120	125
Phe Ser Met Val Ile Asp Lys Gly Val Val Lys Ala Leu Asn Val Glu	130	135	140
Pro Asp Gly Thr Gly Leu Thr Cys Ser Leu Ala Pro Asn Ile Leu Ser	145	150	155
			160

Gln Leu

<210> 5
 <211> 675
 <212> DNA
 <213> Mus musculus

<400> 5
 tgctccgtgc atcgacgtgc ttggcaggca gagcaggccg gaaagaagca ggttgggagt 60
 gtggcgggagc ccgcagcttc agcagctccg cgggtgaccat ggccccgatc aaggtgggag 120
 atgccattcc ctcaagtggag gtatttgaag gggaaccggg aaagaaggtg aacttggcag 180
 agctgttcaa gggcaagaaa ggtgttttgt ttggagtccc tggggcattt acacctggct 240

gttctaagac ccacctgcct gggtttgtgg agcaagctgg agctctgaag gctaagggag 300
 cgcaggtggt ggctgtctg agcgtaaatg acgtctttgt gattgaagag tggggctcag 360
 cccaccaggc agaaggcaag gttcggctcc tggctgaccc cactggagcc tttgggaagg 420
 cgacagactt attattgat gattctttgg tgtctctctt tgggaatcgt cggctgaaaa 480
 ggttctccat ggtgatagac aacggcatag tgaaggcact gaacgtggag ccagatggca 540
 caggcctcac ctgcagcctg gcccccaaca tcctctccca actctgaggc cctggccaga 600
 tgtctctga ctctcccatc tctccacccc ggctctaggc caaaaggctc ggtacctcct 660
 tactgggagc cacgt 675

<210> 6
 <211> 162
 <212> PRT
 <213> Mus musculus

<400> 6

Met Ala Pro Ile Lys Val Gly Asp Ala Ile Pro Ser Val Glu Val Phe
 1 5 10 15

Glu Gly Glu Pro Gly Lys Lys Val Asn Leu Ala Glu Leu Phe Lys Gly
 20 25 30

Lys Lys Gly Val Leu Phe Gly Val Pro Gly Ala Phe Thr Pro Gly Cys
 35 40 45

Ser Lys Thr His Leu Pro Gly Phe Val Glu Gln Ala Gly Ala Leu Lys
 50 55 60

Ala Lys Gly Ala Gln Val Val Ala Cys Leu Ser Val Asn Asp Val Phe
 65 70 75 80

Val Ile Glu Glu Trp Gly Arg Ala His Gln Ala Glu Gly Lys Val Arg
 85 90 95

Leu Leu Ala Asp Pro Thr Gly Ala Phe Gly Lys Ala Thr Asp Leu Leu
 100 105 110

Leu Asp Asp Ser Leu Val Ser Leu Phe Gly Asn Arg Arg Leu Lys Arg
 115 120 125

Phe Ser Met Val Ile Asp Asn Gly Ile Val Lys Ala Leu Asn Val Glu

130

135

140

Pro Asp Gly Thr Gly Leu Thr Cys Ser Leu Ala Pro Asn Ile Leu Ser
 145 150 155 160

Gln Leu

<210> 7
 <211> 469
 <212> DNA
 <213> Homo sapiens

<400> 7
 ggggtatggga ctagctggcg tgtgcgccct gagacgctca gcgggctata tactcgtcgg 60
 tggggccggc ggtcagtctg cggcagcggc agcaagacgg tgcagtgaag gagagtgggc 120
 gtctggcggg gtccgcagtt tcagcagagc cgctgcagcc atggcccca tcaagggttcg 180
 gctcctggct gatccactg gggcctttgg gaaggagaca gacttattac tagatgattc 240
 gctggtgtcc atctttggga atcgacgtct caagagggtc tccatggtgg tacaggatgg 300
 catagtgaag gccctgaatg tggaaccaga tggcacaggc ctcacctgca gcctggcacc 360
 caatatcatc tcacagctct gaggccctgg gccagattac ttctccacc cctccctatc 420
 tcacctgcc agcctgtgtc tggggccctg caattggaat gttggccag 469

<210> 8
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 8
 ggggtatggga ctagctggcg tgtgcgccct gagacgctca gcgggctata tactcgtcgg 60
 tggggccggc ggtcagtctg cggcagcggc agcaagacgg tgcagtgaag gagagtgggc 120
 gtctggcggg gtccgcagtt tcagcagagc cgctgcagcc atggcccca tcaagacaca 180
 cctgccaggg tttgtggagc aggctgaggc tctgaaggcc aaggaggtcc aggtggtggc 240
 ctgtctgagt gttaatgatg cttttgtgac tggcgagtgg ggccgagccc acaaggcgga 300
 aggcaagggt cggctcctgg ctgatccac tggggccttt gggaaggaga cagacttatt 360
 actagatgat tcgctggtgt ccatctttgg gaatcgacgt ctcaagaggt tctccatggt 420
 ggtacaggat ggcatagtga aggccctgaa tgtggaacca gatggcacag gcctcacctg 480
 cagcctggca cccaatatca tctcacagct ctgaggccct gggccagatt acttctcca 540

cccctcccta tctcacctgc ccagccctgt gctggggccc tgcaattgga atgttggcca 600
g 601

<210> 9
<211> 604
<212> DNA
<213> Homo sapiens

<400> 9
gggtatggga ctagctggcg tgtgcgccct gagacgtca gcgggctata tactcgtcgg 60
tggggccggc ggtcagtctg cggcagcggc agcaagacgg tgcagtgaag gagagtgggc 120
gtctggcggg gtccgcagtt tcagcagagc cgctgcagcc atggcccca tcaaggtggg 180
agatgccatc ccagcagtgg aggtgtttga aggggagcca gggaacaagg tgaacctggc 240
agagctgttc aagggaaga aggggtgtgct gtttgagatt cctggggcct tcacctctgg 300
atgttccaag gttcggctcc tggctgatcc cactggggcc tttgggaagg agacagactt 360
attactagat gattcgctgg tgtccatctt tgggaatcga cgtctcaaga ggttctccat 420
ggtggtacag gatggcatag tgaaggccct gaatgtggaa ccagatggca caggcctcac 480
ctgcagcctg gcacccaata tcatctcaca gctctgaggc cctgggccag attacttctt 540
ccacctctcc ctatctcacc tgcccagccc tgtgctgggg ccttgcaatt ggaatgttgg 600
ccag 604

<210> 10
<211> 2710
<212> DNA
<213> Homo sapiens

<400> 10
tctgtccctt agcgcccccg cgggggctta ccccatccca ctccatgacc tcccctcccc 60
ccatggcgaa ttcccacctt tctgtctttc actcacttcc tggaaccgtc cccagggcct 120
tggaaccttc cccttctct cccaaacctt gtgagacccc attccctttc tacttcatcc 180
tgctctcaac ttttgggctc ctgagaggcc ctacacctg actctctctc cctacctact 240
ctgggtccat gaagccctca agtactctgg ggatggatcc ttcccccttc aaaagattcc 300
ttctttttgt ctacacctcc tgggtgtagg ggctggaca cctccccca acgttccacc 360
tgccgtgccc ctctctcttc ctctctctga ggggtggacc ctgagacctg gccaatgacc 420
tctccctcca tgttgtcagg gactctctct ccccccaaa tacagccctc tagccctgt 480

ccattttatt ccactccttt cctgtaacct agacagcatg ttatgcaacc ctttgcgaca	540
catggggaaa ccttcctcc cttcctctgt tgtcaccaat ggccccttaa gaggagcagg	600
gccaccttga aacttgagg atatggggta acccagtggg agcgggcagg gagggccctt	660
ggaaactgac agggctggag tatcctgctg ggtttcagcc ccggttcctg caggcacagc	720
tgccaggctc tctgttcacc ttctgcctc tggtttgccc cggctccctc acccccctta	780
ccctggagtc cttccttcta ggtgggagat gccatcccag cagtggaggt gtttgaaggg	840
gagccagga acaaggtgaa cctggcagag ctgttcaagg gcaagaaggg tgtgctgttt	900
ggagttcctg gggccttcac ccctggatgt tccaagggtga ggcccttccc cttctgaaga	960
tcaggacctg gggatctttt gtgttgctct taagtccctc acatagtcct gataggactc	1020
ctaaaaagca tttcagtgcc atcacaaaac aagtagagct gggtagagct gggcgcggtg	1080
gctcacgcct gtaatcccag cactttggga ggccaaggcg ggtggatcac gaggtcagga	1140
gtccaaaacc agcctggcca agatggtgaa accctgtctc tactaaaaat gcaaaaaaat	1200
cagccggata tgggtggcgg cgctgtaat ccaggtatt ggggaggctg aggcagagaa	1260
ttgcttgaac ccaggaggcg taggttgag tgagtggaga tctgcctct gcagtccagc	1320
ctgggtgaaa gagcgagact ccgtctcaa atgaaaaaa aaaaagaaaa caagtagaga	1380
ctgcaaaaag ggaacagtac cgggaatgtt ggagaaaaac atactacaat taaatccaac	1440
accctgttg gtctgtctaa atgacaggca ctgtggaagg tgcttgggac tcagataaat	1500
aagacaaaga tctgcccag gaaagttcac gtctggacca taaggcatta ggtttcattc	1560
tgagcttct agtggccaag gcaaaaagga aatagaatgg tttagacagc tctcattgtc	1620
tgatcaaagg tgttgaggca gagcactgag gagggcctgg agataaaggg tgggctgggg	1680
gtcagatgca gttatccctt tgccgaccct ttgttcccct tcctcagaca cacctgccag	1740
ggtttgtgga gcaggctgag gctctgaagg ccaaggaggt ccagggtgtg gcctgtctga	1800
gtgttaatga tgcccttgtg actggcgagt ggggccgagc ccacaaggcg gaaggcaagg	1860
tgaggtgagg ggccctgcagg gagtcaggac caggtaggat attcttcttg tgacctctac	1920
tttctctgca ggttcggctc ctggctgac ccactggggc ctttgggaag gtgagtgttc	1980
ccctgaccgc cacagggaca tggcgggtgc gggagcagtg ggggcccttg gcctcttcaa	2040
ggatttctga cacttttctc tgtctcttct taggagacag acttattact agatgattcg	2100
ctgggtgtcca tctttgggaa tcgacgtctc aagaggtaaa agtggagagt cctctgtgga	2160
gaaagtcctc tgtgggagag agtcctctgt gggagagagt cctctgtgga gagggctcctc	2220

tgtgggaaga gtcgtctgtg ggggagatgt gtgggagaga gtcctgtgtg gggagagtct	2280
tctgtagggg agagtcctct ggggagagag tcctgtgtgg gggagagtcc tctgtgggga	2340
gagtcctctg tgtggagaga gtcctgtgtg gtggtgagtc ctctgtgggg gagagtcctc	2400
tgtgggggga gtcctctctg gagttctctt gggcccctgg ctgttctactg cctgtctcca	2460
tgcccagcct ccaagcccag gctgatgcag ctggctgggc ccctctttcc ggcaggttct	2520
ccatggtggt acaggatggc atagtgaagg ccctgaatgt ggaaccagat ggcacaggcc	2580
tcacctgcag cctggcaccc aatatcatct cacagctctg aggccctggg ccagattact	2640
tcctccaccc ctccctatct cacctgccca gccctgtgct ggggccctgc aattggaatg	2700
ttggccagat	2710

<210> 11
 <211> 25
 <212> DNA
 <213> Artificial

<220>
 <223> primer

<400> 11	
gccatcccag cagtggaggt gtttg	25

<210> 12
 <211> 24
 <212> DNA
 <213> primer

<400> 12	
ttgaacagct ctgccaggtt cacc	24

<210> 13
 <211> 24
 <212> DNA
 <213> primer

<400> 13	
tggaggtggt tgaaggggag ccag	24

<210> 14
 <211> 24
 <212> DNA
 <213> primer

<400> 14	
caggttcacc ttgttcctg gctc	24

<210> 15	
<211> 20	
<212> DNA	
<213> primer	
<400> 15	
gggtatggga ctagctggcg	20
<210> 16	
<211> 22	
<212> DNA	
<213> primer	
<400> 16	
ctggccaaca ttccaattgc ag	22
<210> 17	
<211> 24	
<212> DNA	
<213> primer	
<400> 17	
atgttatgca accctttgcg acac	24
<210> 18	
<211> 24	
<212> DNA	
<213> primer	
<400> 18	
gtgtttgaag gggagccagg gaac	24
<210> 19	
<211> 24	
<212> DNA	
<213> primer	
<400> 19	
agagacaggg tttcaccatc ttgg	24
<210> 20	
<211> 805	
<212> DNA	
<213> Homo sapiens	
<400> 20	
gccaggaggc ggagtggaag tggccgtggg gcgggatatgg gactagctgg cgtgtgcgcc	60
ctgagacgct cagcgggcta tatactcgtc ggtggggccg gcggtcagtc tgcggcagcg	120

gcagcaagac ggtgcagtga aggagagtgg gcgtctggcg ggggccgcag tttcagcaga 180
gccgctgcag ccatggcccc aatcaagggtg ggagatgccca tcccagcagt ggaggtgttt 240
gaaggggagc caggggaacaa ggtgaacctg gcagagctgt tcaagggcaa gaaggggtgtg 300
ctgtttggag ttcttggggc cttcaccctt ggatgttcca agacacacct gccagggttt 360
gtggagcagg ctgaggctct gaaggccaag ggagtccagg tggcggcctg tctgagtgtt 420
aatgatgcct ttgtgactgg cgagtggggc cgagcccaca aggcggaagg caaggttcgg 480
ctcctggctg atccactgg ggcctttggg aaggagacag acttattact agatgattcg 540
ctgggtgtcca tctttgggaa tcgacgtctc aagaggttct ccatgggtgg acaggatggc 600
atagtgaagg ccctgaatgt ggaaccagat ggcacaggcc tcacctgcag cctggcaccc 660
aatatcatct cacagctctg aggccttggg ccagattact tcctccaccc ctccctatct 720
cacctgccca gccctgtgct ggggccctgc aattggaatg ttggccagat ttctgcaata 780
aacacttgtg gtttgcgga aaaaa 805

<210> 21
<211> 214
<212> PRT
<213> Homo sapiens

<400> 21

Met Gly Leu Ala Gly Val Cys Ala Leu Arg Arg Ser Ala Gly Tyr Ile
1 5 10 15

Leu Val Gly Gly Ala Gly Gly Gln Ser Ala Ala Ala Ala Ala Arg Arg
20 25 30

Cys Ser Glu Gly Glu Trp Ala Ser Gly Gly Val Arg Ser Phe Ser Arg
35 40 45

Ala Ala Ala Ala Met Ala Pro Ile Lys Val Gly Asp Ala Ile Pro Ala
50 55 60

Val Glu Val Phe Glu Gly Glu Pro Gly Asn Lys Val Asn Leu Ala Glu
65 70 75 80

Leu Phe Lys Gly Lys Lys Gly Val Leu Phe Gly Val Pro Gly Ala Phe
85 90 95

Thr Pro Gly Cys Ser Lys Thr His Leu Pro Gly Phe Val Glu Gln Ala

100					105					110						
Glu	Ala	Leu	Lys	Ala	Lys	Gly	Val	Gln	Val	Val	Ala	Cys	Leu	Ser	Val	
115					120					125						
Asn	Asp	Ala	Phe	Val	Thr	Gly	Glu	Trp	Gly	Arg	Ala	His	Lys	Ala	Glu	
130					135					140						
Gly	Lys	Val	Arg	Leu	Leu	Ala	Asp	Pro	Thr	Gly	Ala	Phe	Gly	Lys	Glu	
145					150					155					160	
Thr	Asp	Leu	Leu	Leu	Asp	Asp	Ser	Leu	Val	Ser	Ile	Phe	Gly	Asn	Arg	
165					170					175						
Arg	Leu	Lys	Arg	Phe	Ser	Met	Val	Val	Gln	Asp	Gly	Ile	Val	Lys	Ala	
180					185					190						
Leu	Asn	Val	Glu	Pro	Asp	Gly	Thr	Gly	Leu	Thr	Cys	Ser	Leu	Ala	Pro	
195					200					205						
Asn	Ile	Ile	Ser	Gln	Leu											
210																